

**CITY OF EL PASO, TEXAS**  
**DEPARTMENT HEAD'S SUMMARY REQUEST FOR COUNCIL ACTION (RCA)**

**DEPARTMENT:** Building Permits & Inspections

**AGENDA DATE:** November 30, 2004

**CONTACT PERSON/PHONE:** R. Alan Shubert, P.E.

**DISTRICT(S) AFFECTED:** \_\_\_\_\_

**SUBJECT:**

**APPROVE** a resolution / ordinance / lease to do what? **OR AUTHORIZE** the City Manager to do what? Be descriptive of what we want Council to approve. Include \$ amount if applicable.

An Ordinance amending Title 18 (Building and Construction), Chapter 18.08 (Building Code), of the El Paso City Code, to adopt the 2003 edition of the International Building Code with changes appropriate for the City of El Paso with penalties not to exceed Two-Thousand Dollars (\$2,000.00) per day per violation as provided in Section 18.02.107 of the El Paso City Code

**BACKGROUND / DISCUSSION:**

Discussion of the what, why, where, when, and how to enable Council to have reasonably complete description of the contemplated action. This should include attachment of bid tabulation, or ordinance or resolution if appropriate. What are the benefits to the City of this action?

An Ordinance amending Title 18 (Building and Construction), by creating Chapter 18.10 (Residential Code), of the El Paso City Code and adopting the 2003 edition of the International Residential Code with changes appropriate for the City of El Paso, with penalties not to exceed Two-Thousand Dollars (\$2,000.00) per day per violation as provided in Section 18.02.107 of the El Paso City Code

**PRIOR COUNCIL ACTION:**

Has the Council previously considered this item or a closely related one? If so, when?

N/A

**AMOUNT AND SOURCE OF FUNDING:**

How will this item be funded? Has the item been budgeted? If so, identify funding source by account numbers and description of account. Does it require a budget transfer?

N/A

**BOARD / COMMISSION ACTION:**

Enter appropriate comments or N/A

N/A

\*\*\*\*\*REQUIRED AUTHORIZATION\*\*\*\*\*

**LEGAL:** (if required) \_\_\_\_\_ **FINANCE:** (if required) \_\_\_\_\_

**OTHER:**

(Example: if RCA is initiated by Purchasing, client department should sign also)

*Information copy to appropriate Deputy City Manager*

**APPROVED FOR AGENDA:**

**CITY MANAGER:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE AMENDING TITLE 18 (BUILDING AND CONSTRUCTION),  
CHAPTER 18.08 (BUILDING CODE), OF THE EL PASO CITY CODE, TO ADOPT THE  
2003 EDITION OF THE INTERNATIONAL BUILDING CODE WITH CHANGES  
APPROPRIATE FOR THE CITY OF EL PASO  
WITH PENALTIES NOT TO EXCEED TWO-THOUSAND DOLLARS (\$2,0000.00) PER  
DAY PER VIOLATION AS PROVIDED  
IN SECTION 18.02.107 OF THE EL PASO CITY CODE.**

**WHEREAS**, by Ordinance No. 024728 enacted December 12, 2000 the 2000 edition of the International Building Code of the International Code Council was adopted with changes appropriate for the City of El Paso; and

**WHEREAS**, the 2003 edition of the International Family of Codes has been published and adoption of the 2003 edition of the International Building Code is now proposed; and

**WHEREAS**, the Building Permits & Inspections Director, the Building and Zoning Advisory Committee (BZAC) and the Development Coordinating Committee (DCC) have reviewed and favorably recommended the adoption of local amendments to the 2003 International Building Code appropriate for the City of El Paso; and

**WHEREAS**, the City Council has deemed the proposed modifications appropriate for the City;

**NOW, THEREFORE, be it ordained by the City Council of the City of El Paso:**

**A.** That Title 18 (Building and Construction), Chapter 18.08 (Building Code), of the El Paso City Code, shall be and is hereby amended in its entirety to read as follows:

**18.08.010 Short Title.**

This chapter may be cited as the El Paso Building Code.

**18.08.020 Adoption.**

The book entitled "International Building Code," 2003 Edition, a copy of which, authenticated by the signature of the mayor and city clerk, and made a public record by resolution of the city council, is on file in the city clerk's office, and is adopted as the Building Code of the city, as fully as if copied at length in this chapter, but with the changes set forth in this chapter.

**Exception:** As an alternative, existing buildings undergoing repair, alterations, additions or change of occupancy shall be permitted to comply with the El Paso Existing Building Code.

**18.08.030 Chapter 1 - Administration - Deleted.**

International Building Code Chapter 1 - Administration shall be and is hereby deleted in

its entirety.

**18.08.040 Chapter 18.02 Adopted - Administration.**

Chapter 18.02 - Building and Construction Administrative Code of the Municipal Code shall serve as the administrative chapter for the Building Code.

**18.08.050 Section 306.4 Added - Required Separation for Group F Tenants.**

Section 306.4, Required Separation for Group F Tenants, shall be and hereby is added to read as follows:

**306.4 Required Separation for Group F Tenants.**

Group F occupancy tenants shall be separated from other tenants by 1-hour fire partitions and horizontal assemblies or a Code required fire barrier.

**18.08.060 Section 310.1 R-3 Amended - Residential R-3.**

International Building Code Section 310.1 Residential Group R-3 is amended to read as follows:

**R-3** Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I, including child care facilities which accommodate six or more children of any age who stay less than 24 hours per day and are permitted under the Zoning Ordinance or personal home care facilities permitted under the Zoning Ordinance.

**18.08.070 Section 311.4 Added - Required Separation for Group S Tenants.**

Section 311.4, Required Separation for Group S Tenants, shall be and hereby is added to read as follows:

**311.4 Required Separation for Group S Tenants.**

Tenants of a Group S occupancy shall be separated from other tenants by 1-hour fire partitions and horizontal assemblies or a Code required fire barrier. Non-fire rated partitions may be used to separate Group S tenants provided no area between partitions rated at 1-hour or more exceeds 3,000 sq. ft.

**18.08.080 Section 418 Added - Fences.**

International Building Code Section 418, Fences, is added at the end of Chapter 4, Special Occupancy Requirements to read as follows:

**418 Fences**

**418.1 Electrified Fences**

1. The use of electrical fences is restricted to use for control of domestic farm animals in areas zoned and actually utilized for farming or ranching activities; or for other areas where large domestic animals such as horses or cattle are legally maintained, upon application to the Building Permits and Inspections Director in each case.

2. Only battery-powered units are acceptable. Units must be UL approved for proposed use and final installation acceptable to the Building Permits and Inspections Director
3. Fences must be clearly marked and identified with easily recognizable signs at intervals not exceeding twenty-five (25) feet.

#### **418.2. Barbed Wire, Farm/Ranch**

1. Barbed wire fences installed in conventional multi-strand configuration may be used for the same purpose, the same area, and under the same conditions outlined in Section 418.3.
2. Wire must be securely fastened to durable wooden or metal posts, spaced not to exceed fifteen (15) feet center-to-center, and designed to withstand all loads reasonably expected to be imposed upon them.
3. Gates in such fences shall have solid frames, be conventionally hinged, and shall not swing over public property.

#### **418.3 Barbed Wire Other Than Farm/Ranch**

1. Barbed wire may be used as a topping on walls and fences in areas zoned for commercial and manufacturing uses provided such wire is properly attached and secured to risers or outriggers especially designed for this purpose. Such barbed wire installation shall be placed not less than seven (7) feet above finished grade at any point along the fence, and shall not at any point extend beyond the property line, over the public way, or adjoining property.
2. The use of barbed wire for dwellings or apartments in residential and apartment zones is prohibited.
3. The use, design and minimum height of barbed wire fence topping for occupancies other than dwellings or apartments located in residential or apartment zones shall be determined by the Building Permits and Inspections Director for each such installation. Such determination shall be based on the need for barbed wire protection, considering the probable risk of theft or trespass, the character of the neighborhood, and other pertinent factors; the possible hazards to persons; and reasonable consideration of appearance.

#### **418.4 Use of Broken Glass**

The use of broken glass and similar materials designed to do bodily harm, as a topping for fences and walls is prohibited.

#### **18.08.090 Section 501.2 Amended - Premises Identification.**

Section 501.2, Premises Identification, shall be and hereby is amended to read as follows:

## **501.2 Premises Identification.**

### **501.2.1 Definitions.**

For the purposes of administering the numbering of buildings, the following definitions shall apply:

**"Building numbering"** means those numbers and/or letters as may be needed to identify building(s) at a municipal street address.

**"Municipal street address"** means the building numbering used in conjunction with the street name and assigned by the City Department of Planning, Research and Development for the purpose of identifying individual properties.

**"Prominently displayed"** means that which is conspicuously located, readily noticeable, and easily readable from the street during normal daytime atmospheric conditions by the driver of an emergency response vehicle.

### **501.2.2 Municipal Street Address Identification Required.**

Building numbering shall be prominently displayed on all buildings for which a municipal street address has been assigned in accordance with the requirements of this Section.

### **501.2.3 Building Numbering Character Height.**

Building numbering shall be displayed in characters having a minimum height conforming to the following table:

<b>Distance Building Numbering is Setback from the Street Curb</b>	<b>Minimum Height</b>
Less than 50 ft.	6"
Equal to or greater than 50 ft. but less than 100 ft.	8"
Equal to or greater than 100 ft. but less than 150 ft.	10"
Equal to or greater than 150 ft. but less than 200 ft.	12"
Equal to or greater than 200 ft.	See 501.2.3.1

**501.2.3.1** Where the distance of the building numbering located on the nearest building wall is equal to or greater than 200 ft. from the street curb, building numbering shall be located on another permanent structure that is closer to the street curb than 200 feet. If no other such structure exists, a permanent structure shall be provided so that the building numbering shall be located within 200 feet of the street curb. Such numbering shall be sized in accordance with 501.2.3.

### **501.2.3.2 Building Numbering Characters.**

The characters used for building numbering shall be oriented so that they read from left to right horizontally, are not wrapped around corners, are not turned on the side, and are not arranged to be read vertically. The characters shall be a simple, block lettering

style without serifs and shall not be slanted or italicized. The characters shall be designed and mounted to avoid shadows that diminish the readability.

#### **501.2.3.3 Color.**

The color contrast between the building numbering characters and the background against which they are viewed shall be sharply contrasted and sufficiently distinct to ensure legibility/readability. These contrasting colors shall be subject to the approval of the Fire Chief.

#### **501.2.3.4 Visibility and Readability.**

Building numbering shall be installed and maintained so that it is clearly visible and easily readable from the street and not obscured by any obstructions such as, but not limited to, landscaping, signage, vehicles, off-street parking, other buildings or building elements.

#### **501.2.3.5 Building Numbering Location.**

1. When the primary public entry to the building fronts on the addressed street, building numbering shall be located on the building wall facing the addressed street.
2. On other buildings, building numbering shall be located on the nearest building wall fronting on the addressed street.
3. Building numbering may be located on a canopy or other permanent structure fronting on the addressed street where the numbering is more prominently displayed than on the building wall.
4. Building numbering, complying with the other requirements with this Section, may be provided on a freestanding sign located on the property where the numbering is more prominently displayed than on the building wall. Building numbering provided on a freestanding sign shall not be included in the calculation of the allowable sign area.
5. In the event that the location of building numbering complying with this subparagraph does not result in compliance with Section 501.2.2, the location shall be as directed by the Fire Chief.

#### **501.2.3.6 Multiple Individual Occupancies.**

When a building contains multiple individual occupancies, each of which has the same municipal street address, each occupancy shall be identified by additional numbers and/or letters, a minimum of 6 (six) inches high, located in close proximity to its entranceway. This requirement shall be in addition to the building numbering of the municipal street address located on the building wall or other structure as required in this Chapter.

#### **501.2.3.7 Multiple Buildings at a Municipal Street Address.**

When there is more than one (1) building at a municipal street address, the building nearest to the addressed street shall display the building numbering of the municipal street address. Each remaining building shall be further identified by displaying distinguishing numbers and/or letters on at least one (1) wall located as directed by the

Fire Chief.

**501.2.3.8 Buildings with Multiple Street Addresses.**

When there is more than one (1) municipal street address assigned to buildings located on the same lot, each building shall comply with the building numbering requirements.

**501.2.3.9 Illumination.**

The use of illumination to display building numbering during the nighttime hours is recommended, but shall not be mandatory.

**501.2.3.10 Additional Building Numbering.**

The owner of a property may provide additional building numbering beyond the building numbering required by this Section. Such additional building numbering, when located on a surface facing a street other than the addressed street, shall also contain the name of the addressed street in addition to the addressed numbering. Additional building numbering shall not be subject to the other requirements of this Section.

**501.2.4 Appeal.**

The owner of a property may appeal the determination of the location for building numbering by the Fire Chief to the Building Board of Appeals in accordance with Section 2.30.

**501.2.5 Administration and enforcement.**

The requirements of this Section shall be administered as part of the building permit and inspection process. The Building Permits and Inspections Director shall refuse the issuance of a final inspection and certificate of occupancy unless the building numbering has been provided as required by this Section.

**501.2.6 Existing Buildings.**

All existing buildings and buildings for which the permit application was received prior to January 1, 2005, except residential buildings containing not more than four (4) dwelling units, shall comply with this Section within thirty (30) days of the date of a notice of correction issued by the Fire Chief. The Fire Chief and the Building Permits and Inspections Director are authorized to issue a notice to correct or a citation to the owner of any property on which the building numbering has not been provided as required by this Section.

**18.08.100 Section 907.2.1.3 Amended - System Response.**

Section 907.2.1.3, System Response, shall be and hereby is amended to read as follows:

**907.2.1.3 System Response.**

Upon activation of two or more smoke detectors, a single smoke detector with alarm verification, an automatic sprinkler system or other approved fire detection device any conflicting or confusing sounds and visual distractions shall automatically stop.

**18.08.110 Section 910.3.1.2 Amended - Sprinklered Buildings.**

Section 910.3.1.2, Sprinklered Buildings, shall be and hereby is amended to read as follows:

**910.3.1.2 Sprinklered Buildings.**

Smoke and heat vents shall not be installed in sprinklered buildings. Mechanical smoke exhaust complying with Section 910.4 shall be installed in sprinklered buildings.

**18.08.120 Section 910.3.4 Amended - Curtain Boards.**

Section 910.3.4, Curtain Boards, shall be and hereby is amended to read as follows:

**910.3.4 Curtain Boards.**

Curtain Boards shall be required in areas not equipped with an automatic approved sprinkler system. Curtain Boards may be deleted in areas equipped with an approved automatic sprinkler system.

**18.08.130 Section 910.4 Amended - Mechanical Smoke Exhaust.**

Section 910.4, Mechanical Smoke Exhaust, shall be and hereby is amended to read as follows:

**910.4 Mechanical Smoke Exhaust.**

Buildings equipped with a sprinkler system other than an ESFR system shall be equipped with a smoke removal system capable of providing a minimum of four air changes (15 minute air change). Buildings equipped with an ESFR sprinkler system shall be equipped with a smoke removal system capable of providing a minimum of two air changes (30 minute air change).

**18.08.140 Section 910.4.1 Amended - Location.**

Section 910.4.1, Location, shall be and hereby is amended to read as follows:

**910.4.1 Location.**

Exhaust fans shall be uniformly spaced and the maximum distance between fans shall not be greater than 200 ft.

**18.08.150 Section 910.4.2 Amended - Size.**

Section 910.4.2, Size, shall be and hereby is amended to read as follows:

**910.4.2 Size.**

Fans shall have a maximum individual capacity of 30,000 cfm.

**18.08.160 Section 1007 Deleted - Accessible Means of Egress.**

Section 1007, Accessible Means of Egress, shall be and is hereby deleted in its entirety.



**18.08.170 Chapter 11 Re-titled and Amended - Accessibility for People with Physical Disabilities.**

International Building Code Chapter 11 shall be and hereby is re-titled and amended to read as follows:

**Chapter 11  
Universal Accessibility**

**1101.1 Scope**

- A.** All buildings and structures and their associated sites and facilities shall be made universally accessible as required by this chapter.
- B.** The design and construction of accessible building elements shall be in accordance with this chapter and Sections 4.1 through 4.35 and as modified in amended special application sections 5 through 13 of the "**TEXAS ACCESSIBILITY STANDARDS (TAS)**" or its successor if changed in the future, and the requirements of this Chapter.
- C.** The document titled, "**Texas Accessibility Standards (TAS)**" of the Architectural Barriers Act (Article 9102, Texas Civil Statutes), a copy of which, authenticated by the signature of the Mayor and City Clerk, and made a public record by resolution of the City Council, is on file in the City Clerk's Office and except as modified in this Chapter, is hereby adopted and shall be considered an integral part of the Building Code.

**EXCEPTIONS:**

- 1. Group R3 - One and Two Family Dwellings.**  
One and two family dwellings regulated by the El Paso Residential Code, Chapter 18.10, and their accessory buildings shall be exempt from the requirements of this Section.
- 2. Group R2 Occupancies.**  
Group R2 Occupancies having not more than four units on a site are exempt from the requirements of this Section.
- 3. Group R1 occupancies.**  
Group R1 Occupancies that are actually occupied as a residence by the proprietor and that have ten or fewer rooms on a site for rent or hire are exempt from the requirements of this Section.
- 4. Storage Mezzanines.**  
Mezzanines used solely for storage shall be exempt from the requirements of this Section provided the area of the inaccessible level is less than 2000 square feet.

**5. Unoccupiable Spaces.**

Unoccupiable spaces shall be exempt from the requirements of this Section. For the purposes of this Section, unoccupiable spaces shall mean those spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways, or non-passenger elevators, and frequented only by service personnel for maintenance purposes.

**6. Religious Ritual Places.**

Places used primarily for religious rituals within either a building or facility of a religious organization such as baptisteries, chancels and/or altars, confessionals and similar places are exempt from the requirements of this Section.

**1101.1.1 Maintenance of Facilities.**

Any building, facility, dwelling unit, or site which is constructed or altered to be accessible or adaptable under this Section shall be maintained accessible/adaptable during its occupancy.

**1101.1.2 Variances.**

Any exemptions from or modifications of the requirements of the Texas Accessibility Standards (TAS) obtained for any project through a variance granted by the Texas Department of Licensing and Regulation (TDLR) shall be deemed a variance under this chapter and shall not be required to obtain additional approval of the Building Board of Appeals as described in 18.02.105. The Building Permits and Inspections Director may issue a conditional building permit, pending final determination from TDLR, provided the applicant submits proof that a variance application for the requested exemption or modification has been submitted to TDLR.

**1102 Definitions.**

For purposes of this Section, the following definitions shall be used.

**MEZZANINE OR MEZZANINE FLOOR** - That portion of a story which is an intermediate floor level placed within a story and having occupiable space above and below its floor. See also SBC 505.

**DWELLING UNIT, TYPE A** - A dwelling unit designed and constructed for accessibility in accordance with amended TAS Section 13.2.

**DWELLING UNIT, TYPE B** - A dwelling unit designed and constructed for accessibility in accordance with amended TAS Section 13.3.

**GROUND FLOOR DWELLING UNIT** - A dwelling unit with a primary entrance and habitable space at grade.

**MULTI-STORY DWELLING UNIT** - A dwelling unit with habitable or bathroom space

located on more than one story.

**1103 TAS Section 4.1.3(5) - Amended.**

TAS Section 4.1.3(5) shall be and hereby is amended by adding Exception 5 to read as follows:

**EXCEPTION 5: Multi-Story R2 Buildings and Structures.**

An accessible means of vertical access is not required when the building or structure is not more than three stories in height.

**1104 TAS Section 4.1.8 Change of Occupancy - Added.**

TAS Section 4.1.8 shall be and hereby is added to read as follows:

**4.1.8 Change of Occupancy.** The provisions of TAS Section 4.1.3 shall apply to existing buildings that undergo a change of occupancy.

**Exception:** The installation of an elevator is not required in an altered facility that is less than three stories or has less than 3,000 square feet per story unless the building is a shopping center, a shopping mall, the professional office of a health care provider, a terminal, depot, or other station used for specified transportation, or an airport terminal.

**1105 TAS Section 4.3.11 - Amended - Areas of Rescue Assistance.**

TAS Section 4.3.11 shall be and hereby is amended by deleting item 4.3.11(7). All other provisions of TAS Section 4.3.11 shall remain in full force and effect.

**1106 TAS Section 5 - Retitled.**

TAS Section 5 shall be and hereby is re-titled to read as follows:

- 5. Group A and Group B Occupancies used for food or drink sale or consumption.**

**1107 TAS Section 6 - Retitled.**

TAS Section 5 shall be and hereby is re-titled to read as follows:

- 6. Group I Unrestrained Occupancy.**

**1108 TAS Section 7 - Retitled.**

TAS Section 7 shall be and hereby is re-titled to read as follows:

- 7. Group B Occupancy used for retail sales and Group M Occupancy.**

**1109 TAS Section 8 - Retitled.**

TAS Section 8 shall be and hereby is re-titled to read as follows:

- 8. Group A Occupancy -Libraries, Group B Occupancy - Libraries and Group E Occupancy - Libraries.**

**1110 TAS Section 9 - Retitled.**

TAS Section 9 shall be and hereby is re-titled to read as follows:

**9. Group R1 Occupancies.**

**1111 TAS Section 10 - Retitled.**

TAS Section 10 shall be and hereby is re-titled to read as follows:

**10. Group A, B and S Occupancies used as Transportation Facilities.**

**1112 TAS Section 11 - Added.**

TAS Section 11 is hereby added and titled to read as follows:

**11. Judicial, Legislative, and Regulatory Facilities.[Reserved]**

**1113 TAS Section 12 - Added.**

TAS Section 12 is hereby added and titled to read as follows:

**12. Detention and Correctional Facilities.[Reserved]**

**1114 TAS Section 13 - Added**

TAS Section 13 is hereby added to read as follows:

**13. Accessible Residential Housing - Group R2 Occupancies**

**13.1 New Construction.**

**13.1.1 Number of Accessible Units.** In Group R2 occupancies containing more than 4 dwelling units, all dwelling units shall be Type B dwelling units. In Group R-2 occupancies containing more than 4 dwelling units, at least 5% but not less than one of the dwelling units, shall be a Type A dwelling unit. All dwelling units shall be considered to determine the total number of accessible units.

**EXCEPTIONS:**

- 1.** Requirements for Type B Dwelling Units shall not apply to dwelling units that are located above or below the first level containing dwelling units and that are not provided with elevator access thereto.
- 2.** A multistory dwelling unit which is not provided with elevator service is not required to comply with requirements for Type B dwelling units. Where a multistory dwelling unit is provided with elevator service to only one floor, the floor provided with elevator service shall comply with the requirements for a Type B dwelling unit and a toilet facility shall be provided.
- 3.** The number of Type B dwelling units provided in multiple non-elevator buildings on a single site may be reduced to a percentage of the ground floor units which is equal to the percentage of the entire site having grades, prior to development, which are 10% or less; but in no case shall the number of Type B units be less than 20% of the ground floor dwelling units on the entire site. In addition to the percentage established above, all

ground floor units served by an entrance on an accessible route shall be made adaptable.

4. The required number of Type A and Type B dwelling units shall not apply to a site where the lowest floor or the lowest structural building member is required to be at or above the base floor elevation resulting in:
  1. A difference in elevation between the minimum required floor elevation at the primary entrances and all vehicular and pedestrian arrival points within 50 feet exceeding 30 inches.
  2. A slope exceeding 10% between the minimum required floor elevation at the primary entrances and all vehicular and pedestrian arrival points within 50 feet.

### **13.1.2 Site Impracticability.**

**13.1.2.1** For purposes of Exception 3, the percentage of the total buildable area of the undisturbed site with a natural grade less than 10% slope shall be calculated. The analysis of the existing slopes (before grading) shall be done on a topographical survey with one foot (1') or two foot (2') contour intervals with slope determination made between each successive interval. The accuracy of the slope analysis shall be certified by a Registered Professional Engineer or Professional Surveyor.

**13.1.2.2** For purposes of Exception 4, vehicular or pedestrian arrival points include public or resident parking areas; passenger loading zones; and public streets or sidewalks. Where no such arrival points are within 50 feet of the primary entrances, the closest arrival point shall be used. In the case of sidewalks, the closest point to the entrance will be where a public sidewalk entering the site intersects with the sidewalk to the entrance. In the case of resident parking areas, the closest point to the planned entrance will be measured from the entry point to the sidewalk immediately adjacent to the parking area that is located closest to the planned entrance. The slope shall be measured on a straight line from the point of planned entrance to each vehicular or pedestrian arrival point.

**13.1.3 Common Use and Public Areas.** Rooms and spaces available to the general public and spaces available for the use of residents, which serve Group R2 accessible or adaptable dwelling units, shall be accessible.

**EXCEPTION:** Recreational facilities in 13.1.5.

**13.1.4 Site Accessibility.** At least one accessible route shall connect accessible building or facility entrances with all accessible and adaptable dwelling units within the building or facility and with those accessible exterior and interior spaces and facilities that serve the accessible or adaptable dwelling unit.

**EXCEPTION:** If the slope of the finished grade between accessible facilities and buildings exceeds 1:12, or where physical barriers prevent the installation of an accessible route, a vehicular route with parking at each accessible facility or building shall be permitted in place of the accessible route.

**13.1.5 Recreational Facilities.** Where recreational facilities are provided serving accessible or adaptable dwelling units, 25% but not less than one of each type in each group of such facilities shall be accessible. All recreational facilities of each type on a site shall be considered to determine the total number of each type which are required to be accessible.

**13.1.6 Primary Entrance.** The primary entrance shall be located on an accessible route from public or common areas. The primary entrance shall not be a bedroom.

### **13.1.7 Accessible Route**

**13.1.7.1 General.** At least one accessible route complying with this subsection shall connect all spaces and elements, which are a part of the dwelling unit. Accessible routes within Type A dwelling units shall comply with 13.1.7.1.1 through 13.1.7.1.3.

**EXCEPTION:** one of the following is not required to be on an accessible route in Type B dwelling units:

1. A raised floor area in a portion of a living, dining or sleeping room; or
2. A sunken floor area in a portion of a living, dining or sleeping room; or
3. A mezzanine that does not have plumbing fixtures or an enclosed habitable space; or
4. Attics and unfinished basements.

**13.1.7.1.1 Location.** At least one accessible route shall connect all spaces and elements that are a part of the dwelling unit. Where only one accessible route is provided, it shall not pass through restrooms, closets or similar spaces.

**13.1.7.1.2 Wheelchair Turning Space.** All spaces shall provide a wheelchair turning space complying with TAS 4.2.3.

**13.1.7.1.3 Components.** Accessible routes shall consist of one or more of the following elements: floor or ground surfaces with a slope not steeper than 1:20, ramps, elevators, and wheelchair (platform) lifts.

**13.1.7.2 Clear Width.** Clear width of the accessible route shall be 36 inches minimum, except at doorways.

**13.1.7.3 Changes in Level.** Changes in level of not more than 1/2 inch in height shall comply with TAS Section 4.5.2. Changes in level greater than 1/2 inch in height shall be accomplished by a ramp, elevator, or wheelchair lift complying with TAS Sections 4.8, 4.10 and 4.11.

**EXCEPTION:** Where exterior deck, patio or balcony surface materials are impervious, the finished exterior impervious surface shall be 4 inches maximum below the finished floor level of the adjacent interior spaces of the dwelling unit.

### **13.1.8 Doors and Doorways**

**13.1.8.1 Primary Entrance Door.** The primary entrance door to the dwelling unit shall comply with TAS Section 4.13.

**EXCEPTION:** Maneuvering clearances required by TAS 4.13 are not required on the dwelling unit side of the doorway.

**13.1.8.2 Other Doorways.** Doorways intended for user passage shall comply with 13.1.8.2.1.

**13.1.8.2.1 Clear width.** The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of not less than 32 inches. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches deep shall provide a clear opening of 36 inches minimum. Where this section requires a minimum clear width of 32 inches and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 32 inches. The height of doors shall be not less than 80 inches.

- Exceptions:**
1. Door openings within a dwelling unit shall not be less than 78 inches in height.
  2. Exterior door openings in dwelling units, other than the required exit door, shall not be less than 76 inches in height.
  3. Door openings required to be accessible within Type B dwelling units shall have a minimum clear width of 31.75 inches.

**13.1.8.3 Thresholds.** Thresholds, if provided, shall be 1/2 inch high maximum and shall comply with TAS 4.13.8.

**EXCEPTION:** Thresholds at exterior sliding doors may be 3/4 inches high maximum, provided they are beveled with a slope of not greater than 1:2.

**13.1.8.4 Double Leaf Doors.** Where an inactive leaf with operable parts of hardware located more than 48 inches above the floor is provided, the active leaf shall provide the required clear width.

**13.1.8.5 Automatic Doors.** Automatic doors shall comply with TAS Section 4.13.12.

**13.1.8.6 Power-Assisted Doors and Low-Energy Power-Operated Doors.** Power-assisted doors shall comply with TAS 4.13.12.

### **13.1.9 Operating Controls.**

**13.1.9.1 General.** Lighting controls, electrical receptacles, environmental controls for security or intercom systems shall comply with TAS Section 4.27.

**EXCEPTIONS:**

1. Electrical receptacles serving a dedicated use.
2. Appliance mounted controls or switches.

3. A single receptacle located above base cabinets, with a length of countertop uninterrupted by a sink or appliance, provided the receptacle is located less than 36 inches from the intersection of two walls behind the countertop and at least one receptacle complying with 13.1.9.1 is provided for the length of the countertop. All other receptacles shall comply with 13.1.9.1.
4. Floor electrical receptacles.
5. Plumbing fixture controls.
6. HVAC diffusers.
7. Ceiling fan mounted controls.

**13.1.9.2 Clear Floor Space.** A 30 inch by 48 inch minimum clear floor space positioned for forward or parallel approach shall be provided at each accessible operating control. Where a parallel approach is provided to an operating control located above an obstruction, the offset between the centerlines of the clear floor space and the operating control shall be 12 inches maximum.

**13.1.10 Ramps.** Ramps shall comply with TAS Section 4.8.

**13.1.11 Wheelchair Lifts.** Wheelchair lifts shall comply with ASME/ANSI A17.1 and with TAS Section 4.11.

## **13.2 Type A Dwelling Units**

### **13.2.1 General.**

Type A dwelling Units shall comply with the requirements of **Section 13.3 - Type B Dwelling units** except as modified in this section. Each Type A Dwelling Unit shall be provided with a minimum of one 30" x 60" roll-in shower.

**13.2.2 Bathrooms.** Bathrooms shall comply with 13.2.2.

**13.2.2.1 Doors.** Doors shall not swing into the clear floor space required for any fixture unless a clear floor space complying with TAS Section 4.2.4.1 is provided beyond the arc of the door swing within the room

### **13.2.2.2 Water Closets**

**13.2.2.2.1** Water closets shall be located in the corner of the bathroom. See Fig. 28 of the TAS.

**13.2.2.2.2** Water closet height shall be from 15 inches minimum to 19 inches maximum measured from the floor to the top of the toilet seat.

**13.2.2.2.3** Grab bars complying with TAS Sections 4.16 and 4.26 of the TAS shall be installed.

**13.2.2.2.4** The toilet paper dispenser shall comply with TAS Section 4.16.6.



### **13.2.2.3 Lavatory, Mirrors and Medicine Cabinets**

**13.2.2.3.1** The lavatory shall comply with TAS Section 4.19.

**13.2.2.3.2** Medicine cabinets, provided under the lavatory shall provide, or shall be removable to provide, the clearances specified in TAS Section 4.19.2.

**13.2.2.3.3** Medicine cabinets provided above the lavatory shall be located with a usable shelf 44 in. maximum above the floor.

**13.2.2.3.4** Mirrors shall comply with TAS Section 4.19.

**13.2.2.4 Bathtubs.** Where a bathtub is provided, it shall have the following features:

**13.2.2.4.1** Clear floor space shall comply with TAS Section 4.20.

**13.2.2.4.2** A removable in-tub seat or permanent seat at the head of the tub shall be provided in compliance with TAS Section 4.20.3. The structural strength of seats and their attachments shall comply with TAS Section 4.26.3. In-tub seats shall be capable of being mounted securely and shall not slip during use.

**13.2.2.4.3** Grab bars shall be installed in compliance with TAS Sections 4.20 and 4.26, or structural reinforcement shall be made that will allow installation of grab bars meeting these requirements.

**13.2.2.4.4** Faucets and other controls shall comply with TAS Section 4.27.4.

**13.2.2.4.5** A shower spray unit shall be provided in compliance with TAS Section 4.20.6.

**13.2.2.5 Showers.** Showers shall comply with TAS Section 4.21.

**13.2.2.6 Clear Floor Space.** Clear floor space at fixtures shall be permitted to overlap.

**13.2.3 Kitchens.** Accessible kitchens and their components shall comply with the requirements of this section.

**13.2.3.1 Clearances.** Where counters provide the knee clearance specified in TAS Section 4.19.2, clearances between those counters and all opposing base cabinets, countertops, appliances, or walls in kitchens shall be 40 in. minimum, except in U-shaped kitchens, where such clearances shall be 60 in. minimum.

**13.2.3.2 Clear Floor Space.** A clear floor space 30 in. by 48 in. minimum complying with TAS Section 4.24 that allows either a forward or a parallel approach by a person in a wheelchair shall be provided at all appliances in the kitchen, including the range or cooktop, oven, refrigerator/freezer, dishwasher, and trash compactor. Laundry equipment located in the kitchen shall comply with Section 13.2.4.

**13.2.3.3 Operable Parts.** All operable parts in kitchens shall comply with TAS Section 4.27.

**13.2.3.4 Work Surfaces.** At least one 30 in. wide minimum section of counter shall provide a work surface that complies with the following requirements.

**13.2.3.4.1** The counter shall be adjustable or replaceable as a unit at variable heights between 28 in. and 36 in., measured from the floor to the top of the counter surface, or shall be mounted at a fixed height of 34 in. maximum, measured from the floor to the top of the counter surface.

**13.2.3.4.2** Base cabinets, if provided, shall be removable under the full 30 in. minimum frontage of the counter. The finished floor shall extend under the counter to the wall.

**13.2.3.4.3** Counter thickness and supporting structure shall extend 2 in. maximum over the required clear area.

**13.2.3.4.4** A clear floor space of 30 in. by 48 in. minimum shall allow a forward approach to the counter. The clear floor space shall be permitted to extend 19 in. maximum underneath the counter. The knee space shall have a clear width of 30 in. minimum.

**13.2.3.4.5** There shall be no sharp or abrasive surfaces under such counters.

**13.2.3.5 Sink.** The sink and surrounding counter shall comply with the following requirements.

**13.2.3.5.1** The sink and surrounding counter shall be adjustable or replaceable as a unit at variable heights between 28 in. and 36 in., measured from the finished floor to the top of the counter surface or sink rim, or shall be mounted at a fixed height of 34 in. minimum, measured from the finished floor to the top of the counter surface or sink rim.

**13.2.3.5.2** Where sinks are installed to be adjustable in height, rough-in plumbing shall be located to accept connections of supply and drain pipes for sinks mounted at a height of 28 in.

**13.2.3.5.3** The depth of the sink bowl shall be 6 1/2 in. maximum. Only one bowl of double-bowl or triple-bowl sinks needs to meet this requirement.

**13.2.3.5.4** Faucets shall comply with TAS Section 4.27.4.

**13.2.3.5.5** Base cabinets, if provided, shall be removable under the full 30 in. minimum frontage of the sink and surrounding counter. The finished flooring shall extend under the counter to the wall.

**13.2.3.5.6** Counter thickness and supporting structure shall extend 2 in. maximum over

the required clear space.

**13.2.3.5.7** A clear floor space of 30 in. by 48 in. minimum shall allow forward approach to the sink. The clear floor space shall be permitted to extend 19 in. maximum underneath the sink. The knee space shall have a clear width of 30 in. minimum.

**13.2.3.5.8** Water supply pipes and drainpipes under sinks shall be protected in accordance with TAS Section 4.19.4.

**13.2.3.6 Ranges and Cooktops.** Ranges and cooktops shall comply with 13.2.3.1 and 13.2.3.2. If ovens or cooktops have knee spaces underneath, they shall be insulated or otherwise protected on the exposed contact surfaces for protection against burns, abrasions, or electrical shock. The clear floor space shall be permitted to overlap the knee space, if provided, by 19 in. maximum. The location of controls for ranges and cooktops shall not require reaching across burners.

**13.2.3.7 Ovens.** Ovens shall comply with 13.2.3.1 and 13.2.3.2. Ovens shall be of the self-cleaning type or be located adjacent to an adjustable height counter with a 30 in. wide minimum knee space below. For side-opening ovens, the door latch side shall be next to the open counter space, and there shall be a pull-out shelf under the oven extending the full width of the oven and pulling out 10 in. minimum when fully extended. Ovens shall have controls on front panels. Controls shall be permitted to be located on either side of the door.

**13.2.3.8 Refrigerator/Freezers.** Refrigerator and freezers shall comply with 13.2.3.1 and 13.2.3.2. Side-by-side combination freezer and refrigerator appliances shall have at least 50 percent of the freezer space and at least 50 percent of the refrigerator space located 54 in. maximum above the floor. Other combination refrigerators and freezers shall have at least 50 percent of the freezer space and 100 percent of the refrigerator space and controls 54 in. maximum above the floor. Freezers with less than 100 percent of the storage volume within the limits specified in TAS Sections 4.2.5 and 4.2.6 shall be the self-defrosting type.

**13.2.3.9 Dishwashers.** Dishwashers shall comply with 13.2.3.1 and 13.2.3.2. Dishwashers shall have all rack space accessible from the front of the machine for loading and unloading dishes.

**13.2.3.10 Kitchen Storage.**

**13.2.3.10.1** Cabinets, drawers, and shelf storage areas shall comply with TAS Section 4.25.

**13.2.3.10.2** At least one shelf of all cabinets and storage shelves mounted above work counters shall be 48 in. maximum above the floor.

**13.2.3.10.3** Door pulls or handles for wall cabinets shall be mounted as close to the bottom of cabinet doors as possible. Door pulls or handles for base cabinets shall be

mounted as close to the top of cabinet doors as possible.

**13.2.4 Laundry Facilities.** If laundry equipment is provided within individual accessible dwelling units, or if separate laundry facilities serve one or more accessible dwelling units, they shall meet the requirements of this section.

**13.2.4.1 Washing Machines and Clothes Dryers.** Accessible washing machines and dryers in common-use laundry rooms shall be front loading and shall comply with TAS Section 4.2.4.

**13.2.4.2 Operable Parts.** Laundry equipment shall comply with TAS Section 4.27.

### **13.3 Type B Dwellings**

#### **13.3.1 General**

Type B dwelling units, where required, shall comply with this section.

**EXCEPTION:** Type B dwelling units designed and constructed as Type A dwelling units.

#### **13.3.8 Kitchens**

##### **13.3.2.1 Clearances.**

**13.3.2.1.1** Clearances between all opposing base cabinets, countertops, appliances, or walls within kitchen work areas shall be 40 inches minimum.

**13.3.2.1.2** In kitchens with counters, appliances, or cabinets located on three contiguous sides, clearance between all opposing base cabinets, countertops, appliances, or walls within kitchen work areas shall be 60 inches minimum.

##### **13.3.2.1.3 Clear Floor Space.**

**13.3.2.1.3.1** A 30 inch by 48 inch clear floor space shall be provided at the sink and at each appliance.

**13.3.2.1.3.2** The clear floor space at the sink shall be positioned for parallel approach shall be provided. The offset of the centerlines of the clear floor space and sink shall be 9 inches maximum.

**EXCEPTION:** Sinks complying with Section 4.24 of TAS.

**13.3.2.1.3.3** Where provided, the dishwasher, range, cooktop, oven, refrigerator/freezer and trash compactor shall have a clear floor space positioned for either parallel or forward approach.

**13.3.2.1.3.4** The dishwasher door, in the open position, shall not overlap the dishwasher clear floor space.

### **13.3.3 Toilet and Bathing Facilities.**

**13.3.3.1 General.** Toilet and bathing facilities in Type B dwelling units shall comply with 13.3.3.2, 13.3.3.3 and 13.3.3.4.

**EXCEPTION:** Facilities on levels not required to be accessible.

### **13.3.3.2 Clear Floor space.**

**13.3.3.2.1** Doors shall not swing into the clear floor space required for any fixture.

**EXCEPTION:** Where a 30 inch x 48 inch clear floor space is provided within the room, beyond the arc of the door swing.

**13.3.3.2.2** Clear floor space shall be permitted to include knee and toe clearances in accordance with Figures 31 and 32 of TAS.

**13.3.3.2.3** Clear floor spaces shall be permitted to overlap with clearances and other floor spaces.

**13.3.3.3 Grab Bar Reinforcement.** Where walls are located so as to permit installation of grab bars and seats complying with TAS Sections 4.16.4, 4.20.4, 4.21.3, or 4.21.4, reinforcement shall be provided for the installation of grab bars meeting those requirements.

**EXCEPTION:** Reinforcement is not required in a room containing only a lavatory or water closet on the accessible level of the dwelling unit.

**13.3.3.4 Toilet & Bathing Fixtures.** Toilet and Bathing fixtures shall comply with either 13.3.3.4.1 or 13.3.3.4.2.

**13.3.3.4.1 Option A.** Each fixture provided shall comply with this section.

**EXCEPTION:** A lavatory and a water closet located in a room containing only a lavatory and water closet, provided that the room does not contain the only lavatory or water closet on the accessible level of the dwelling unit.

**13.3.3.4.1.1 Lavatory.** A 30 inch by 48 inch minimum clear floor space positioned for parallel approach shall be provided.

**EXCEPTION:** A lavatory complying with 4.19 of TAS. The offsets of the centerlines of the clear floor space and lavatory shall be 9 inches maximum.

**13.3.3.4.1.2 Water Closet.** The lateral distance from the centerline of the water closet to a bathtub or lavatory shall be 18 inches minimum on one side and 15 inches minimum on the other side. Where the water closet is located adjacent to the wall, the lateral distance from the centerline of the water closet to the wall shall be 18 inches and 15 inches minimum to a lavatory or bathtub. The water closet shall be located to allow for the installation of a grab bar on the side with 18 inch clearance. Clearance areas around the

water closet shall comply with one of the following:

1. **Parallel Approach.**  
56" minimum, measured from the wall behind the water closet.  
48" minimum, measured from a point 18" from the centerline of the water closet on the side designated for the installation of grab bars.  
Vanities or lavatories located on the wall behind the water closet are permitted to overlap the clear floor space.
2. **Forward Approach.**  
66" minimum, measured from the wall behind the water closet.  
48" minimum, measured from a point 18" from the centerline of the water closet on the side designated for the installation of grab bars.  
Vanities or lavatories located on the wall behind the water closet are permitted to overlap the clear floor space.
3. **Parallel or Forward Approach.**  
56" minimum, measured from the wall behind the water closet.  
42" measured from the centerline of the water closet.

**13.3.3.4.1.3 Bathing Facilities.** Where bathing fixtures are provided, at least one bathing fixture in each toilet/bathing area shall comply with the following:

1. **Parallel Approach Bathtubs.**  
Bathtubs with a parallel approach shall have a space 30 inches wide by 60 inches long minimum adjacent to the bathtub. A lavatory may extend into the 30 inch x 60 inch space at the control end of the tub, if a 30 inch x 48 inch clearance remains.  
**Exception:** Lavatories complying with TAS Section 4.19 may be placed in the clearance.
2. **Forward Approach Bathtubs.**  
Bathtubs with a forward approach shall have a clearance 48 inches wide by 60 inches long minimum adjacent to the bathtub. A water closet may be placed in the clearance at the control end of the bathtub.
3. **Stall Shower.**  
If a stall shower is the only bathing fixture, the stall shower shall have minimum dimensions of 36 inches x 36 inches. Reinforcing the shower seat is not required in stall showers larger than 36 inches x 36 inches. A clear floor space of not less than 30 inches measured perpendicular from the face of the shower stall, by 48 inches, measured from the shower head wall, shall be provided.

**13.3.3.4.2 Option B.**

One of each type of fixture provided shall comply with this section. The accessible fixtures shall be located in a single toilet/bathing area and shall not require travel through other parts of the dwelling unit.

#### **13.3.3.4.2.1 Lavatory.**

A 30 inch. by 48 inch. minimum clear floor space positioned for parallel approach shall be provided. The offset of the centerlines of the clear floor space and lavatory shall be 9 inches maximum.

**EXCEPTION:** Forward approach is permitted for a lavatory complying with section 4.19 of TAS.

The fixture rim shall be 34 inches maximum above the finished floor.

#### **13.3.3.4.2.2 Water Closet.**

The water closet shall comply with 13.3.3.4.1.2.

##### **13.3.3.4.2.2.1 Bathing Fixtures.**

Where bathing fixtures are provided, at least one bathing fixture shall comply with the following:

##### **1. Bathtub.**

A 30 inches by 48 inches minimum clear floor space positioned for parallel approach shall be provided adjacent to the bathtub. The front edge of the clear floor space shall align with the control end of the bathtub.

##### **2. Stall Showers.**

If a stall shower is the only bathing fixture, the stall shower shall have minimum dimensions of 36 inches x 36 inches. A clear floor space of not less than 30 inches measured perpendicular from the face of the shower stall by 48 inches measured parallel from the shower head wall shall be provided.

#### **13.4 Alterations.**

##### **13.4.1 Alterations to Group R2 Occupancies Completed prior to December 31, 1976.**

Group R2 Occupancies, including occupancies such as apartments, boarding houses (not transient), convents, fraternities, sororities, and monasteries shall provide accessible housing as defined by in Section 13.1.

**Exception:** The burden of providing sufficient evidence that the following requirements are satisfied is on the building owner or agent. The Building Official is empowered to request additional relevant clarifications or material facts deemed necessary to determine that the requirements listed in this subsection are satisfied before rendering a decision. Upon written request to the City, notice shall be provided concerning any appeal of the Building Permits & Inspections Director's determination under this section.

##### **1. Multi-family rehabilitation.**

The Building Permit & Inspection Director may waive the requirements of Section 13.1, when all of the following requirements are satisfied:

- a. The exception is requested for an existing structure that was completed prior to December 31, 1976.
- b. The exception is requested for a structure that provides Type A Dwelling Units in accordance with the following table:

<b><u>Total # Units</u></b>	<b><u># of accessible units provided</u></b>
4 - 20	1
21 - 40	2
41 - 60	3
61 - 80	4
81 - 100	5
Over 100 Units	5 plus 5% of # of units over 100

- c. The exception is requested for a structure whose common or public areas and facilities such as recreational room(s), laundry facilities, garbage and recycling collection areas, mailbox locations, lobbies, foyers, management offices, rental offices, conference rooms, etc... are located on the ground floor and are made fully accessible
- d. The exception is requested for a structure in which all doors and frames are being remodeled and made accessible in all ground floor units.

**2. Accessible route exceptions based on site impracticality.** Existing buildings are exempt from the requirement to provide at least one building entrance on an accessible route when all of the following requirements are satisfied:

- a. The applicant demonstrates that because of site characteristics, all possible routes result in a difference in finished grade elevation exceeding thirty (30) inches and ten (10) percent measured between any building entrance and all vehicular or pedestrian arrival points within fifty (50) feet of the entrance; or if there are no arrival points within fifty (50) feet of the entrance; the site characteristics result in a difference in finished grade elevation exceeding thirty (30) inches and ten (10) percent between any building entrance and any available vehicular or pedestrian arrival point.
- b. The applicant has supplied topographical surveys, with a minimum two (2) foot contour intervals, performed by a registered professional engineer or professional surveyor that show in detail all of the existing site improvements such as parking, walkways, driveways, etc...
- c. The exception is requested for an existing structure that was completed prior to December 31, 1976.

#### **18.08.180 Figure 1609.3 Amended - Basic Wind Speeds.**

Section 1609.3 Basic Wind Speed shall be and hereby is amended to read as follows:

#### **1609.3 Basic Wind Speed.**



The basic wind speed, in miles per hour, for the determination of the wind loads shall be 100 mph 3-second-gust wind speed.

**18.08.190 Section 1612.3 Amended - Establishment of Flood Hazard Areas.**

Section 1612.3, Establishment of Flood Hazard Areas, shall be and hereby is amended to read as follows:

**1612.3 Establishment of Flood Hazard Areas.**

Chapter 18.60, Flood Prevention Management, of the Municipal Code is hereby adopted by reference and declared part of this section.

**18.08.200 Section 1612.5.1.1 Amended.**

Section 1612.5.1.1 shall be and hereby is amended to read as follows:

**1612.5.1.1** As part of the lowest floor elevation inspection required by Chapter 18.02, Building and Construction Administrative Code, certification of the elevation of the lowest floor, including basement.

**18.08.210 Chapter 17 Deleted**

Chapter 17 of the International Building Code, 2003 Edition shall be and is hereby deleted in its entirety.

**18.08.220 Section 1803.7 Added - Excavation Greater Than 5 Feet.**

Section 1803.7, Excavations is amended by adding the following:

**1803.5 Excavation Greater Than 5 Feet.**

Excavations which will exceed five (5) feet in depth shall provide trench safety systems that meet Occupational Safety and Health Administration (O.S.H.A.) standards. Supporting systems shall be designed by a qualified professional and meet accepted engineering requirements. The Building Permits & Inspections Director may require that such supporting system designs be made part of the project drawings and specifications.

**18.08.230 Section 1805.1.1 Added.**

International Building Code Section 1805.1.5 shall be and hereby is added to read as follows:

**1805.1.1** Buildings not exceeding one story in height and 120 square feet in area shall be exempt from these requirements provided such building is properly anchored to resist overturning and sliding as required in 1609.1.3.

**18.08.240 Section 2114 Added - Rock Masonry Retaining Walls, Yard Walls and Fences.**

International Building Code Chapter 21, Rock Masonry Construction is amended by adding Section 2114 as follows to the end of the Chapter:

## **2114 Rock Masonry Retaining Walls, Yard Walls and Fences.**

### **2114.1 General.**

1. All retaining Rock masonry walls, Rock yard walls and Rock fences shall be so designed as to withstand all normal and special loading which may be expected for the intended use of the structure and no subsequent change of use shall be permitted without provisions for the additional loading imposed by such new uses. For the purpose of this Section, fences are further defined as free-standing structures supporting no vertical weight other than the weight of the materials used in the construction of the fence and resisting no externally applied horizontal loadings other than wind or earthquake forces. Freestanding masonry sign pylons shall be classified as fences.
2. Rock masonry walls over six (6) feet in height and those used in whole or in part for earth retention, in excess of 24 inches in height, shall be designed as structural walls and provided with adequate footings of reinforced concrete. Such design of wall and footings shall be presented to the Building Permits & Inspections Director for approval prior to erection.
3. Rock walls and fences, which due to inadequate or improper design or deterioration, show indications of becoming unstable or unsafe shall be considered unsafe. Unsafe walls and fences shall be abated by repair and rehabilitation or by demolition.

### **2114.2 Retaining Walls.**

Permanent excavations with a grade separation on a vertical line, as opposed to embankments along the natural angle of repose of the soil material, that are retained with native stone rubble masonry shall have the native stone rubble masonry designed and constructed within the provisions of this chapter. Both residential and non-residential construction shall comply with this Section.

#### **2114.2.1 Design and Stability.**

1. All masonry, and native stone rubble masonry walls used to retain more than four (4) feet of earth shall be designed by a registered professional engineer.
2. Walls shall be analyzed as gravity type structures. Native rubble masonry construction spanning between buttresses may be considered as having a flexural tensile/compressive strength of fifteen (15) PSI and an axial compressive strength not to exceed sixty (60) PSI. The effective width (thickness) dimensions for structural strength and stability shall be reduced by six (6) inches unless the wall is constructed utilizing a cast-in-place concrete core to insure solid construction.
3. Foundation concrete shall be effectively bonded to the supported native stone rubble masonry in order to enable the system to perform as an integral composite unit. Bonding may be accomplished by the use of stones twelve (12) inches or larger in dimension placed in the plastic concrete of the foundation to obtain a minimum of six (6) inch embedment with a six (6) inch projection to bond with the native stone rubble masonry constructed above.
4. Externally applied loadings acting on retaining structures shall be those computed

from design conditions but shall be no less than required under Chapter 16 of this Code. Parking areas limited to automobiles and other light vehicles shall require a minimum fifty (50) PSF uniform surcharge loading. A minimum of two hundred fifty (250) PSF uniform surcharge loading or AASHTO Lane Loading (whichever is greater) shall be required for parking areas subject to heavy vehicles.

#### **2114.2.2 Materials.**

1. Concrete, reinforcing steel and native stone shall conform to the requirements of Chapters 19 and 21 of this Code. Structural concrete for foundations shall have a minimum twenty-eight (28) day compressive strength of two thousand five hundred (2500) PSI. Concrete for core fill of gravity retaining walls shall have a minimum twenty-eight (28) day compressive strength of two thousand (2000) PSI.
2. Mortar shall have a minimum twenty-eight (28) day compressive strength of one thousand eight hundred (1800) PSI when averaged over three (3) two (2) inch cubes of three (3) three (3) by six (6) inch cylinders in accordance with ASTM C109 or ASTM C780 and shall not contain more than fifteen (15) pounds of ASTM C207, Type S hydrated lime per cubic foot of mortar when mixed by volume. The Building Permits & Inspections Director may require submission of test reports confirming compliance with these requirements.

#### **2114.2.3 Construction.**

1. Foundations shall bear on native undisturbed soil capable of sustaining the load imparted upon it. Subject to the approval of the Building Permits & Inspections Director, foundation may be built upon mechanically compacted soil (native soils with increased densification or engineered fill materials) upon submittal of evidence that the proposed loadings will be adequately supported.
2. Adequate provisions shall be made to eliminate hydrostatic pressure buildup through the use of a free-draining backfill material over an underground water collection system that will drain through the wall and above the foundation in order to insure stability of the foundation supporting soil. Random pattern weep holes shall not be considered as sufficient to accomplish required drainage. Retaining structures retaining less than four (4) feet of earth are not required to provide the above drainage system.
3. Foundations must bear a minimum of two (2) feet below finish grade level or one (1) foot into native undisturbed materials satisfactory for bearing (on the low side of the retaining structures) whichever provides the lowest elevation.

**2114.2.4 Drawings and Specifications.** All structures governed under this section shall be required to submit drawings in accordance with Chapter 18.02 Administrative Code. Such drawings shall include the following:

1. Theoretical calculated soil pressures at the toe and heel of the wall foundation.
2. Factor of safety against horizontal sliding and overturning (tipping) equal to or greater than 1.5.
3. Uniform surcharge loading and soil unit weight used in analysis and design (PCF).
4. Line or strip loadings (PLF) and locations with respect to wall.

5. Assumed unit weight of native stone rubble masonry construction (PCF).
6. Wall thickness and height dimensions with relative positioning for yard wall extensions, retained heights, base widths and foundations.
7. Locations of construction (through-wall) joints, changes in foundation bearing elevations, positioning, extent and construction of underground drainage against the retaining structure.

### **2114.3 Yard Walls and Fences.**

Yard walls and fences of masonry materials shall be considered as non-bearing walls and shall be supported either horizontally or vertically by intersecting fences, pilasters, monolithic columns integral with the fence construction of sufficient strength and stability to provide the required structural support. The minimum thickness shall be sufficient to resist all normal vertical and horizontal loads applied to the fence.

#### **2114.3.1 Design and Stability.**

1. The unsupported height to thickness ( $KH/t$ ) or length to thickness ( $KL/t$ ) shall not exceed 40, where,  $K = 2.0$  for cantilevered conditions, and 1.0 for both ends being supported:
  - $H$  = Height of fence above foundation
  - $L$  = Horizontal distance between stiffening elements
  - $t$  = Thickness of fence
2. In native stone rubble masonry walls with "no mortar" finishes, three (3) inches shall be deducted from the thickness of the fence for each face where this finish is used, when computing the minimum thickness for  $KH/t$ ,  $KL/t$  and structural stability requirements.
3. Lateral support (stiffening elements) shall be provided by intersecting fences, pilasters, monolithic columns integral with the fence construction or other vertical members of sufficient strength and stability to provide the required structural support.
4. Masonry fences, including native stone rubble, shall have each wythe through-bonded with native stone rubble masonry having through-bond stones at a maximum spacing of three (3) feet vertically and three (3) feet horizontally.
5. Adequate strength and stability to resist overturning, and other stresses for externally applied horizontal loads, shall be provided to the satisfaction of the Building Permits & Inspections Director and shall conform to accepted engineering design principles. Wind loading and shape factors shall be as set forth in Chapter 12 of this Code.

#### **2114.3.2 Materials.**

1. All materials shall be in accordance with Chapter 21.
2. Masonry fences, including native stone rubble, shall be laid in Type M, S. or N mortar.
3. Masonry fences, including native stone rubble, shall be provided with a reinforced concrete foundation in accordance with the approved subdivision design standards of the City.

**18.08.250 Section 3107 Amended - Signs.**

International Building Code Section 3107, Signs, is amended to read as follows:

**SECTION 3107 SIGNS**

**3107.1 General.** Signs shall comply with the Zoning Ordinance and shall be designed, constructed and maintained in accordance with this code.

**3107.2 Design Required.**

Before a permit shall be granted, the erector of every outdoor advertising sign with the exception of shingle signs and light cloth temporary signs, shall submit to the Building Permits & Inspections Director a design and stress diagram or plan, containing the necessary information to enable the Building Permits & Inspections Director to determine that such sign complies with all the regulations of this Section. In the case of ground and roof signs over twenty-four (24) feet high or over 200 square feet in facial area, and of projecting signs in excess of thirty (30) square feet in any facial area, and any roof signs not mounted level with the roof plane, such design shall be prepared by a Registered Professional Engineer.

**18.08.260 Section 3201.1 Amended - Scope.**

International Building Code Section 3201.1 is amended to read as follows:

The use of public property or any portion thereof, shall be in accordance with the City Charter, Section 3.18 and the provisions of this Chapter.

**18.08.270 Section 3301.3 Added**

International Building Code Section 3301.3, is added to read as follows:

**3301.3** The temporary use of streets or public property for the storage or handling of materials or of equipment required for construction or demolition, and the protection provided to the public shall comply with the provisions of Chapters 32 and 33 of the International Building Code, and Section 3.18 of the City Charter.

**18.08.280 Section 3305 Amended - Sanitary.**

International Building Code Section 3305 is amended to read as follows:

**SECTION 3305 SANITARY**

**3305.1 Facilities Required.**

Adequate sanitary facilities for the convenience of all workmen shall be provided according to Table 3305.1. Required facilities shall be located not more than one hundred (100) feet from the construction site, and shall not be within sixty (60) feet of any occupied structure, unless the occupant of such structure consents, or unless it is impracticable to locate the facilities the required minimum distance from the structure. Existing facilities owned by others may be used provided permission for their use is

obtained and only if such facilities comply with the requirements of this Section.

**3305.2** Facilities shall be kept in a clean and sanitary condition throughout the duration of the work. The temporary workman's toilet shall be enclosed, screened, and weatherproofed and shall be connected to a sewer. Upon removal of the temporary facilities, the sewer connections shall be removed and the sewer capped. In lieu of connecting to a sewer, the temporary facility may be a portable, enclosed, chemically treated, tank-tight unit.

**Table 3305.1**

NUMBER OF EMPLOYEES	MINIMUM NUMBER OF TOILET FACILITIES
<b>IF SERVICED ONCE PER WEEK *</b>	
1-10	1
11-20	2
21-30	3
31-40	4
Over 40	1 additional facility for each 10 additional employees
<b>IF SERVICED MORE THAN ONCE PER WEEK *</b>	
1-15	1
16-35	2
36-55	3
56-75	4
76-95	5
Over 95	1 additional facility for each 20 additional employees

\* "Servicing" refers to the emptying of waste and the cleaning of the toilet facility. A camp equipped with flush toilets shall meet the standard for "minimum number of toilet facilities if serviced more than once per week".

**18.08.290 Section 3409 - Deleted - Accessibility for Existing Buildings.**

Section 3408, Accessibility for existing Buildings, shall be and hereby is deleted in its entirety.

**18.08.300 Section 3409.2 Amended - Applicability.**

Section 3409.2, Applicability, shall be and hereby is amended to read as follows:

**3409.2 Applicability.**

Structures existing prior to May 28, 1936, in which there is work involving additions, alterations or changes of occupancy shall be made to conform to the requirements of this section or the provisions of Sections 3403 through 3407. The provisions in Sections 3410.2.1 through 3410.2.5 shall apply to existing occupancies that will continue to be or

are proposed to be, in Groups A, B, E, F, M, R, S and U. These provisions shall not apply to buildings with occupancies in Group H or I.

**18.08.310 Appendix D - Adopted and Amended - Fire Districts.**

International Building Code Appendix D, Fire Districts, is adopted and with sections D101, D101.1 and D101.2.1 amended to read as follows:

**D101 Scope.**

The Fire District shall include such territory as defined herein.

**D101.1 Reserved.**

**D101.2.1 Fire District No. 1.** Fire District No. 1 shall include the following portion of the City of El Paso, which is more particularly described by metes and bounds, as follows:

Beginning at the intersection of the east line of Santa Fe Street with the south line of Missouri Street; Thence northeasterly along the south line of Missouri Street to the west line of Campbell Street; Thence southeasterly and southerly along the west line of Campbell Street to the north line of Overland Street; Thence westerly along the north line of Overland Street to the west line of El Paso Street; Thence southerly along the west line of El Paso Street to the north line of Overland Street; Thence westerly along the north line of Overland Street to the east line of Santa Fe Street; Thence northerly and northwesterly along the east line of Santa Fe Street to the point of beginning at the south line of Missouri Street.

**18.08.320 Appendices.**

The appendices unless specifically adopted or referenced are retained as administrative guidance aids.

**18.08.330 Conflicting Ordinances.**

All ordinances and parts of ordinances in conflict with the provisions of this ordinance are hereby repealed as follows:

Ordinances No. 014728, 12/10/2000.

- B.** All references to the ICC Electrical Code shall be construed to mean the Electrical Code of the City of El Paso.
- C.** The effective date of this ordinance shall be \_\_\_\_\_;  
This ordinance shall be applicable to all permit applications received on or after that date.

(ALL SIGNATURES FOLLOW ON NEXT PAGE)

**PASSED AND APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2004.**

THE CITY OF EL PASO

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Joe Wardy  
Mayor

ATTEST:

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Richarda Duffy Momsen  
City Clerk


APPROVED AS TO FORM:



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Lisa A. Hayes  
Assistant City Attorney

APPROVED AS TO CONTENT:



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R. Alan Shubert, Director  
Building Permitting & Inspections Dept.